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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,939	08/13/2004	Daniel W. Jones	34926-CIP1	7941
23589 7.	590 10/20/2005		EXAM	INER
HOVEY WIL	LIAMS LLP BLVD., SUITE 400		TRIEU, T	HAI BA
	Y, MO 64108		ART UNIT	PAPER NUMBER
	•		3748	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)						
	10/710,939	JONES ET AL.						
Office Action Summary	Examiner	Art Unit						
	Thai-Ba Trieu	3748						
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the o	orrespondence address						
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).						
Status								
1) Responsive to communication(s) filed on								
	action is non-final.							
3) Since this application is in condition for allowa	nce except for formal matters, pro	osecution as to the merits is						
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.						
Disposition of Claims								
4)⊠ Claim(s) <u>1-69</u> is/are pending in the application								
4a) Of the above claim(s) is/are withdra	wn from consideration.							
5) Claim(s) is/are allowed.								
6) Claim(s) 1-10,14-16,18,20,23,24,26,28-45,47-	. <u>56,60-62,64,66 and 69</u> is/are reje	cted.						
7) Claim(s) <u>11-13,17,19,21,22,25,27,46,57-59,63</u>	3,65,67 and 68 is/are objected to.							
8) Claim(s) are subject to restriction and/o	or election requirement.							
Application Papers								
9)⊠ The specification is objected to by the Examine	er.							
10) The drawing(s) filed on is/are: a) acc	epted or b) cobjected to by the	Examiner.						
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correc	tion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).						
11) ☐ The oath or declaration is objected to by the Ex	xaminer. Note the attached Office	Action or form PTO-152.						
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:								
1. Certified copies of the priority document		on No						
2. Copies of the cortified copies of the prior								
	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list		ed.						
	·							
Attachment(s)								
Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)								
<ol> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> </ol>	Paper No(s)/Mail Do 5) Notice of Informal F	ate Patent Application (PTO-152)						
Paper No(s)/Mail Date <u>01/10/2005</u> . 6) Other:								

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### Specification

Since the abstract is too long, applicants are required to submit a substitute Abstract to meet the requirement set forth below.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within <u>the range of 50 to 150 words</u>. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

#### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 16, 18, 20, 23, 37, 41, 44, 62, 64, 66, and 69 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically,

The recitation of "can flow" renders the claim indefinite, since it is not clear that under which condition the induction fluid can flow, and under which condition the induction fluid cannot flow through said passage way/ said additional passage way/said second additional passage way. Applicants are required to identify each condition.

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### **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-8, 14-15, 24 and 26, and 28-45; as well as, claims 47-54 and 60-61 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8, 14-15, 24 and 26, and 28-45, as well as, claims 47-54 and 60-61 of copending Application No. 10/710,797 filed on August 03, 2004. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-8, 14-15, 24 and 26, and 28-45, as well as, claims 47-54 and 60-61 of the patent "anticipates" application claims 1-8, 14-15, 24 and 26, and 28-45; as well as, claims 47-54 and 60-61. Accordingly, application claims 1-8, 14-15, 24 and 26, and 28-45; as well as, claims 47-54 and 60-61 are not patentably distinct from patent claim 1-8, 14-15, 24 and 26, and 28-45, as well as, claims 47-54 and 60-61.

CI a first centrifugal supercharger   CI.   - a first compressor drivingl    1 drivingly   1	Instant Application 10/710,939	
- said first centrifugal supercharger inclu-ding: a first inlet, a spaced inlet, a spaced first outlet first outlet, and a first impeller  -a second centrifugal supercharger driving-ly  -said second centrifugal supercharger charger including: a second inlet, a spaced second outlet, and a second impeller  - said first compres-sor include impeller  - a second compres-sor driving-ly  - said second compres-sor driving-ly	y	
inclu-ding: a first inlet, a spaced first outlet first outlet, and a first impeller  -a second centrifugal supercharger driving-ly  -said second centrifugal super-charger including: a second inlet, a spaced second outlet, and a second impeller  inlet, a spaced first outle impeller  -a second compressor driving-ly  - said second compressor second inlet, a spaced second inlet, a spaced second inlet, a spaced second outlet, and a second impeller		
first outlet, and a first impeller  -a second centrifugal supercharger driving-ly  -said second centrifugal super- charger including: a second inlet, a spaced second outlet, and a impeller  -a second compressor - said second compressor second inlet, a spaced second inlet, a spaced second outlet, and a	cluding: a first	
-a second centrifugal supercharger -a second compres-sor drivents of driving-ly  -said second centrifugal super said second compressor charger including: a second inlet, a second inlet, a spaced second outlet, and a and a second impeller	t, and a first	
driving-ly  -said second centrifugal super- charger including: a second inlet, a second inlet, a spaced second outlet, and a and a second impeller		
-said second centrifugal super- charger including: a second inlet, a spaced second outlet, and a and a second impeller	vingly	
charger including: a second inlet, a second inlet, a spaced spaced second outlet, and a and a second impeller		
spaced second outlet, and a and a second impeller	r including: a	
	econd outlet,	
second impeller		
- a fluid flow control assembly a fluid flow control assem	nbly without	
without passing through the other passing through the other of	compressor.	
supercharger.		
Cl a drive assembly operable Cl a drive assembly operable	)	
2 2		
Cl said first and second impellers Cl said first and second impel	ellers	
3		

	- said first and second		- said first and second compressors
	superchargers inclu-ding a		including a transmission
	transmission		
	- said transmission cooperating		- said transmission cooperating
CI.	- said transmission including a	CI.	- said transmission including a plurality
4	plurality of intermeshing gears	4	of intermeshing gears
CI.	- said transmission including a	CI.	- said transmission including a common
5	common rotatable transmission	5	rotatable transmission shaft
	shaft		
	- said drive assembly including an		- said drive assembly including an
	endless element		endless element
CI.	- said fluid flow control assembly	CI.	- said fluid flow control assembly fluidly
6	fluidly intercommunicating the	6	intercommunicating the compressors
	superchargers		
CI.	- said fluid flow control assembly	CI.	- said fluid flow control assembly being
7	being operable to fluid inter-	7	operable to fluid inter-communicate the
	communicate the superchargers		compressors
CI.	- said first phase including a series	CI.	- said first phase including a series
8	phase	8	phase

Cl.	- a case presenting a compression	CI.	- a case presenting a compression
14	chamber and a transmission	14	chamber and a transmission chamber,
	chamber, said first and second		said first and second compressors being
	superchargers being at least		at least partially housed within said
:	partially housed within said		compression chamber
	compres-sion chamber	-	
CI.	- said induction fluid flow control	CI.	- said fluid flow control assembly
15	assembly further including a first	15	including a passageway
	valve		
	- said induction fluid flow control		- said fluid flow control assembly further
!	assembly further including a first		inclu-ding a first valve
	valve		
CI.	- driving a first super-charger	CI.	- driving a first com-pressor
24		24	
	- driving a second supercharger		- driving a second compressor
	- operating the superchargers at		- operating the compressors at least
	least partially in series		partially in series
	- operating the supercharger at		- operating the compressors at least
	least partially in parallel		partially in parallel
		L	

CI.	- switching operation of the super-	CI.	- switching operation of the com-
26	chargers to substantially fully	26	pressors to substantially fully parallel in
	parallel in response to a		response to a predetermined condi-
	predetermined condition		tion
CI.	-steps (a) and (b) including the	CI.	-steps (a) and (b) including the step of
28	step of drivingly connecting the	28	drivingly connecting the compressors
	superchargers		•
CI.	-steps (a) and (b) including the	CI.	-steps (a) and (b) including the step of
29	step of drivingly connecting the	29	drivingly connecting the compressors to
	superchargers to the power		the power source constant ratio
	source constant ratio		
CI.	-steps (a) and (b) including the	CI.	-steps (a) and (b) including the step of
30	step of intermeshing a common	30	intermeshing a common between the
	between the superchargers		compressors
CI.	-steps (a) and (b) including the	CI.	-steps (a) and (b) including the step of
31	step of entraining an endless	31	entraining an endless element
	element		
CI.	- steps (c) and (d) including the	CI.	- steps (c) and (d) including the step of
32	step of operating both super-	32	operating both compressor
	chargers		

CI.	- steps (c) and (d) including the	CI.	- steps (c) and (d) including the step of
33	step of delivering substantially all	33	delivering substantially all of the
	of the induction fluid compressed		induction fluid compressed by the
	by the superchargers		compressors
CI.	- step (c) including step of	CI.	- step (c) including step of operating the
34	operating the superchargers subs-	34	compressors substantially fully in series
	tantially fully in series		
CI.	- housing both superchargers	CI.	- housing both compressors subs-
35	substantially within a case.	35	tantially within a case.
CI.	- intercommunicating the first and	CI.	- intercommunicating the first and
36	second superchargers and the	36	second compressors and the system
	intake manifold,		
	- including the steps of fluidly		- including the steps of fluidly commu-
	commu-nicating the first and		nicating the first and second
	second superchargers with serial		compressors with serial passageway
	passageway and disposing a first		and disposing a first valve along the
	valve along the serial		serial passageway
	passageway		
CI.	- including the step of shifting the	CI.	- including the step of shifting the first
37	first valve into open position	37	valve into open position
CI.	- including the step of shifting the	CI.	- including the step of shifting the first
38	first valve into closed position	38	valve into closed position

CI.	- including the steps of fluid	CI.	- including the steps of fluid
39	communicating the first	39	communicating the first compressor and
	supercharger and the intake		the system
	manifold		
CI.	- including the step of shifting the	CI.	- including the step of shifting the
40	second valve into closed position	40	second valve into closed position
			·
CI.	- including the step of shifting the	CI.	- including the step of shifting the
41	second valve into open position	41	second valve into open position
CI.	- including the steps of fluidly	CI.	- including the steps of fluidly
42	communica-ting the second super-	42	communica-ting the second compressor
	charger and the atmosphere with a		and the atmosphere with a parallel
	parallel passageway		passageway
CI.	- including the step of shifting the	CI.	- including the step of shifting the third
43	third valve into an closed posi-	43	valve into an closed posi-tion
	tion		·
CI.	- including the step of shifting the	CI.	- including the step of shifting the third
44	third valve into an open posi-tion	44	valve into an open posi-tion
CI.	- including the step of fluidly	CI.	- including the step of fluidly
45	communicating the atmosphere,	45	communicating the atmosphere, the first
	the first supercharger, and the		compressor, and the parallel passage-
	parallel passage-way		way

CI.	- including the step of shifting the	CI.	- including the step of shifting the fourth
46	fourth valve into partially closed	46	valve into partially closed position
	position		
CI.	- a first centrifugal supercharger	CI.	- a first compressor drivingly
47	drivingly	47	
	- said first centrifugal supercharger		- said first compres-sor including: a first
-	including: a first inlet, a spaced first		inlet, a spaced first outlet, and a first
	outlet, and a first impeller		impeller
	-a second compres-sor drivingly		-a second compres-sor drivingly
	- said second centrifugal		- said second com-pressor including: a
	supercharger including: a second		second inlet, a spaced second outlet,
	inlet, a spaced second outlet, and		and a second impeller
	a second impeller		·
	- a fluid flow control assembly		- a fluid flow control assembly without
	without passing through the other		passing through the other compressor.
	compressor.		
CI.	- a drive assembly operable	CI.	- a drive assembly operable
48		48	
CI.	- said first and second impellers	CI.	- said first and second impellers
49		49	

	- said first and second		- said first and second compressors
	supercharger including a trans-		including a transmission
	mission		
	- said transmission cooperating		- said transmission cooperating
CI.	- said transmission including a	CI.	- said transmission including a plurality
50	plurality of intermeshing gears	50	of intermeshing gears
CI.	- said transmission including a	CI.	- said transmission including a common
51	common rotatable transmission	51	rotatable transmission shaft
	shaft		
	- said drive assembly including an		- said drive assembly including an
	endless element		endless element
CI.	- said fluid flow control assembly	CI.	- said fluid flow control assembly fluidly
52	fluidly intercommunicating the	52	intercommunicating the compressors
	supercharger		
CI.	- said fluid flow control assembly	CI.	- said fluid flow control assembly being
53	being operable to fluid inter-	53 <sup>-</sup>	operable to fluid intercommunicate the
	communicate the supercharger		compressors
CI.	- said first phase including a series	CI.	- said first phase including a series
54	phase	54	phase

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CI.	- a case presenting a compression	CI.	- a case presenting a compression
60	chamber and a transmission	60	chamber and a transmission chamber,
	chamber, said first and second		said first and second compres-sors
	compres-sors being at least		being at least partially housed within
1	partially housed within said		said compression chamber
	compression chamber		
CI.	- said fluid flow control assembly	CI.	- said fluid flow control assembly
61	1 including a passageway		including a passageway
-	- said fluid flow control assembly		- said fluid flow control assembly further
	further inclu-ding a first valve		including a first valve

Thus it is apparent that the more specific patent claims 1-8, 14-15, 24 and 26, and 28-45; as well as, claims 47-54 and 60-61 encompasse application claims 1-8, 14-15, 24 and 26, and 28-45; as well as, claims 47-54 and 60-61. Following the rationale in *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the specific or narrower invention, applicant may not then obtain a second patent with a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Application claims 1-8, 14-15, 24 and 26, and 28-45; as well as, *claims* 47-54 and 60-61 are anticipated by Patent claims 1-8, 14-15, 24 and 26, and 28-45, as well as, claims 47-54 and 60-61 and since anticipation is the epitome of obviousness, then Application claims 1-8, 14-15,

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24 and 26, and 28-45; as well as, claims 47-54 and 60-61 are obvious over Patent claims 1-8, 14-15, 24 and 26, and 28-45, as well as, claims 47-54 and 60-61.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-10, 15-16, 24, 26, 28-30, 32-34, 36-38, 47-50, 52-56, and 61-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buchi (Patent Number 2,296,268), in view of Gregg (Patent Number 1,998,778).

Buchi discloses a multiphase compressing air assembly for supplying compressed air to a system (20), said assembly / an improved centrifugal air compressing system comprising:

a first compressor (13) drivingly connectable to the crankshaft (10) and operable to compress air for the system/the tubing (See Figure 3),

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said first compressor (13) including a first inlet, (not Numbered) a spaced first outlet (via 22), and a first impeller (26) fluidly between the first inlet and first outlet to compress air (See Figure 3);

a second compressor (15) (See Figure 3),

said second compressor (15) including a second inlet (23), a spaced second outlet (Not Numbered), and a second impeller (Not numbered) fluidly between the second inlet and second outlet to compress air for the system/the tubing (See Figure 3);

a fluid flow control assembly (28, 29) fluidly intercommunicating the superchargers (13, 15) so that the compressors cooperatively provide induction fluid to the system in a number of operating phases, including a first phase in which at least some compressed air from the first outlet is supplied to the second inlet and a second phase in which at least some compressed air from the first and second outlets is supplied to the system without passing through the other compressor (See Figure 3);

said first and second impellers (13, 15) being rotatable, each being operable to compress induction fluid for the system/the tubing when rotated (See Figure 3);

said fluid flow control assembly (28, 29) fluidly intercommunicating the superchargers so that in all operating phases both superchargers compress at least some air for the system whenever the power source is rotating (See Figure 3);

said fluid flow control assembly being operable to fluidly intercommunicate the compressors with the system so that in all operating phases substantially all of the induction fluid compressed by each of the compressors is delivered to the system/the tubing (20);

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said first phase including a series phase in which substantially all compressed air from the first outlet is supplied to the second inlet (See Figure 3);

said second phase including a parallel phase in which substantially all compressed air from the first and second outlets is supplied directly to the system/the tubing (See Figure 3);

said second phase further including a second transition phase, said fluid flow control assembly (28, 29) being configured to switch operation of the compressors from the series phase to the parallel phase in response to a predetermined condition (See Figure 3);

said flow control assembly (28, 29) including a passageway (22) fluidly communicating said first outlet and said second inlet, said flow control assembly (28, 29) further including a first valve (28) disposed along said passageway (22) for controlling the flow of compressed air there through (See Figure 3); and

said first valve (28) shiftable between an open position wherein compressed air can flow through said passageway and a closed position wherein compressed air is prevented from flowing through said passageway (See Figure 3, Page 2, Column 1, lines 44-75, Column 2, lines 1-54).

However, Buchi fails to disclose a second compressor drivingly connectable to the crankshaft and operable to compress air for the system/the tubing; a drive assembly; said first and second compressors including a transmission; and the structural details of the transmission.

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Gregg teaches that it is conventional in the supercharger art, to utilize a second compressor (8, 9) drivingly connectable to the power source and operable to compress air for the system/the tubing (See Figure 1); a drive assembly (10, 11) operable to drivingly connect the compressors to the power source so that each of the compressors operates continuously with rotation of the power source (See Figure 1); said first and second compressors including a transmission (15, 17, 54, 55, 14, 15, 106) drivingly connecting the impellers to the drive assembly (10, 11), said transmission (15, 17, 54, 55, 14, 15, 106) cooperating with the drive assembly to maintain rotation of the impellers at a substantially constant ratio relative to the rotation of the power source (See Figure 1, Page 1, Column 1, lines 5-65); said transmission (15, 17, 54, 55, 14, 15, 106) including a plurality of intermeshing gears with at least one (17) of said gears (15, 17, 54, 55, 14, 15, 106) being common to both compressors (8, 9) (See Figure 1).

It would has been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized a second compressor drivingly connectable to the power source and operable to compress induction fluid for the engine; a drive assembly; said first and second compressors including a transmission; the structural details of the transmission; taught by Gregg, to improve the control of both as turbochargers/superchargers/compressors in the Buchi device.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buchi (Patent Number 2,296,268), in view of Gregg (Patent Number 1,998,778), and further in view of Moller (Pub. Number DE 198 22 874 A1).

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The modified Buchi disclose the invention as recited in the rejection of claim 24

as set forth above; however, fails to disclose both compressors being substantially

within a case.

Moller teaches that it is conventional in the charged internal combustion engine

art, to utilize both compressors substantially housed within a common housing (3) (See

Figures 1-2).

It would has been obvious to one having ordinary skill in the art at that time the

invention was made, to have utilized a common casing for housing both compressors,

to improve the efficiency of the modified Buchi device, since the use thereof would have

made the compressor compact and improve supercharging efficiency by housing both

compressors in one common casing.

Allowable Subject Matter

Claims 11-13, 17, 19, 21-22, 25, 27, 46, 57-59, 63, 65, 67 and 68 are objected to

as being dependent upon a rejected base claim, but would be allowable if rewritten in

independent form including all of the limitations of the base claim and any intervening

claims.

Claims 16, 18, 20, 23, 37, 41, 44, 62, 64, 66, and 69 would be allowable if

rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in

this Office action and to include all of the limitations of the base claim and any

intervening claims.

#### Conclusion

The IDS (PTO-1449) filed on January 18, 2005 has been considered. An initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Wang (US Patent Number 6,935,838 B1) discloses a high-pressure multi-stage centrifugal blower.
- Codan et al. (US Patent Number 5,564,275) disclose a method and an apparatus for high-pressure end exhaust gas recirculation on a supercharged internal combustion engine.
- Yingling (US Patent Number 2,401,677) discloses two-cycle internal combustion engine.
- Matsunaga (Patent Number JP 63-201319 A) discloses a twin turbosupercharger.
- Inaba et al. (Patent Number JP 06-146908 A) disclose an engine with exhaust turbocharger.
- Tajima et al. (Patent Number JP 63-179126 A) disclose an intake device for an engine associated with mechanical supercharger.
- Sato et al. (Patent Number JP 61-197732 A) disclose a variable cylinder internal combustion engine.
- Hans et al. (Patent Number GB 2 302 914 A) disclose a mounting exhaust driven turbochargers on a supporting housing.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTB October 17, 2005 Thai-Ba Trieu Primary Examiner Art Unit 3748

Charlabree -